

## **REMARKS**

Reconsideration of the present application in view of the above amendments and the following remarks is respectfully requested.

### **I. Status of the Claims**

By way of this amendment, Applicants are canceling claims 153-160, 165, 166, 168-170, 173, and 174. Applicants submit that the canceled claims are patentable; however, because the canceled claims somewhat overlap with the subject matter of amended independent Claims 104 and 124, the Applicants have chosen to cancel independent claims 153, 157 and all their dependent claims in an effort to simplify examination. Applicants have added new dependent Claims 175-182. Applicants have amended independent Claims 104 and 124 and many of the dependent claims, which for most cases, was to clarify the antecedent basis of the terms utilized. Thus, Claims 104-127, 137-152, 161-164, 167, 171, 172, and 175-182 are pending in this application.

### **II. Interview with Examiner**

Applicants have received the Interview Summary of January 13, 2006. The following is Applicants' summary of substance of a telephonic interview conducted on December 29, 2005 ("Interview"). Applicants thank the Examiners for the courtesy of the Interview. The focus of the discussion during the Interview was independent claims 104, 124, 153, and 157. These were discussed in relation to Brown, United States Patent No. 5,951,300, ("Brown300") and United States Patent No. 5,941,837 to Amano et al. ("Amano"). Consistent with a previous interview in

May of 2005, the Examiners *again agreed* that Brown300 in combination with Amano did not render the invention obvious because of various deficiencies of Brown300. As was stated in the May 2005 interview, the teachings of Brown300 are inapplicable to the instant claims. The Applicants then discussed distinctions between the claimed invention and the teachings of Amano. The Examiners invited the Applicants to discuss those distinctions in the instant response. Those distinctions resulted in the amendments herein to independent Claims 104 and 124. Finally, the Examiners indicated that they would be able to treat this application in an expedited manner because of the fact that it has been pending for over five years.

#### **Claim Rejection – 35 U.S.C. § 112**

The Examiner has rejected Claim 174 under 35 U.S.C. § 112, second paragraph. Claim 174 has been canceled thus the rejection is rendered moot.

#### **Claim Rejection – 35 U.S.C. §103**

During the Interview, the issues of patentability were narrowed to a discussion of how the claimed invention was patentable over Amano. The Applicants will discuss the patentable distinctions in light of the two independent claims pending. Claims 104 and 124 have each been amended to recite the following step:

calculating, *from said first and second parameters*, quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal.

Claim 104 now recites the additional steps of receiving life activities data of said individual, and generating individual status data from said life activities data. Support for this

amendment can be found throughout the Specification, and specifically at Page 4, lines 3-4, and pages 14-15. Further, Claim 104 has been amended to recite a communicating step which is as follows: communicating to a recipient said calculated quantitative status information regarding said individual and said individual status information. Support for this amendment can be found through the Specification, specifically at Pages 24-26. No new matter has been added by these amendments.

Claim 124 recites a different communicating step, as follows:

communicating to a recipient said calculated quantitative status information indicative of a suggested change in said individual's performance to assist said individual in the achievement of said physiological status goal.

Additionally, each of Claims 104 and 124 have further been amended to clarify that the first and second parameter are produced by at least one of said individual's body and the environment adjacent said individual's body. Support for this amendment is found throughout the Specification, specifically at Page 10, Lines 3-5, and Table 2.

Turning to the Amano reference, Applicants respectfully submit that Amano cannot support a rejection under 35 U.S.C. §§ 102 or 103 for the following reasons. With respect to Claim 104, Amano does not receive the life activities data of the individual as claimed. Since Amano does not disclose the reception of life activities data, Amano necessarily does not teach the claimed step of generating status information from said life activities data. As such, Amano neither anticipates the claimed invention nor renders it obvious. Brown300 cannot ameliorate the deficiencies of Amano as a reference, since, as successfully argued several times in this application's history, Brown300 does not teach communicating any type of quantitative status information or other status information to a recipient. Brown300 merely generates a criticality

index *which is not communicated to a recipient nor is it communicable to the recipient*. For a full discussion of Brown300, the Applicants respectfully refer the Examiner to their arguments in this regard contained in prior responses to Office Actions, the prior two interviews, and the Interview summary.

With respect to both Claims 104 and 124, each claim requires the calculation of quantitative status information indicative of the relative degree of achievement of said individual's performance with relation to said physiological status goal. As discussed in the Interview, the Applicants have amended the claims to make clear that the quantitative status information must be calculated from *two parameters* obtained by the system. In that regard, examples of the claimed "parameters" can be seen in Table 2 on page 10 of the Specification. Applicants have further amended the claim to clarify that the two parameters must be produced by at least one of said individual's body and the environment adjacent said individual's body.

The Amano reference discloses a device and method in which the information or feedback given to the user is an indication of their circulation status, based upon an indicator. In nearly every instance, Amano's indicator is merely obtained from *one parameter only*: the waveforms of a fingertip plethysmogram. While Amano does disclose an accelerometer or other body movement detection means, the accelerometer is merely utilized to detect time periods of exercise, or instances where the user's movement will prohibit the accurate detection of the pulse wave form. See Amano, Col. 7, lines 42-50; Col. 19, lines 41-46. Further evidence of Amano's focus on one parameter is Amano's "Basic Theory Employed in the Preferred Embodiments", which involves the analysis of acceleration pulse waveforms. See Amano, Col. 12. The following are examples of Amano's teachings:

- Figure 2A – Health status information, e.g., good health state, health state beginning to deteriorate, and health state insufficient, are all determined by an analysis of only one parameter: the pulse waveform.
- The invention “[comprises] a pulse wave measuring means for measuring the user’s pulse waveforms, a pulse wave measurement directive detection means which detects a directive by the user to measure pulse waves, and a calculating means which obtains an indicator showing the state of circulation in the user from the pulse waveform during the time that a plethysmogram measurement directive is being output, and a notifying means which notifies the user of the aforementioned indicator.” Amano, Col. 6, lines 18-26. Again, the pulse waveform is the only parameter used in the calculation.
- “CPU 1 checks whether or not the exercise intensity calculated from the measured pulse rate using formula (1) is outside the range determined by the aforementioned upper and lower limit values for exercise intensity. If exercise intensity exceeds the upper limit value, then CPU guides the user to exercise a bit more moderately...” Amano, Col. 21, lines 27-34. Note that only measured pulse rate is used in the determination of exercise intensity and in formula (1) in Col. 21, lines 16-20.

Thus, Amano does not teach calculating, *from said first and second parameters*, quantitative status information indicative of the relative degree of achievement of said individual’s performance with relation to said physiological status goal.

Further, Applicants submit that the Amano accelerometer does not generate data indicative of a second parameter, wherein said parameter is produced by the individual's body or the environment surrounding the individual as claimed. Referring to the parameters of the claimed invention exemplified in Table 2 (in the "Data Used" column), it can be seen that all of the parameters are produced by at least one of said individual's body and the environment adjacent said individual's body, consistent with the requirements of the claims. In contrast to the claimed invention, Amano is used primarily to detect exercise duration. See e.g., Amano, Col. 20, lines 36-45. Duration, i.e., time, is not a parameter produced by at least one of said individual's body and the environment adjacent said individual's body as claimed. Duration is independent of the physiological characteristics of the individual. Moreover, Amano simply uses an accelerometer in this case to automate what otherwise would be a manual function, i.e., the starting and stopping of a clock. Amano teaches that when the accelerometer detects a force above a certain threshold, the accelerometer activates a clock. The clock stops when the force goes below the threshold. Indeed, the accelerometer's mere automation of the "clock" function is demonstrated by Amano's description of "Embodiment 3" in which there is no accelerometer and the user is provided with means ... "to himself [determine] whether or not he is in a state of repose..." Amano, Col. 27, line 17 to Col. 28, line 12.

There is a brief disclosure in Amano with respect to using the accelerometer to measure body movement rather than simply exercise duration. See Amano, Col. 30, lines 45-54. Amano discloses that the body movement data is used to correct the amplitude ratio of the pulse waveform. See Amano, Col. 30, lines 50-54. Yet, such a teaching still does not anticipate the claimed invention or render the claimed invention obvious. This is because Amano's "corrected amplitude ratio" is not "quantitative status information indicative of the relative degree of

achievement of said individual's performance with relation to said physiological status goal" as required by the claims. Further, and with respect to Claim 124, there is no teaching that Amano's corrected amplitude ratio is "indicative of a suggested change in said individual's performance to assist said individual in the achievement of said physiological status goal" as claimed.

Accordingly, Claims 104 and 124, and all claims that depend thereon, are not anticipated or rendered obvious by Amano. Therefore, Applicants respectfully request Claims 104 and 124, and all claims that depend thereon, are in condition for allowance.

## CONCLUSION

In light of the foregoing, Claims 104-127, 137-152, 161-164, 167, 171, 172, and 175-180 are in condition for allowance. Reconsideration is requested at an early date.

Respectfully submitted,

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